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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,369	09/05/2000	Hiroshi Miyagi	A-356	6679

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PORTLAND, OR 97204

EXAMINER

D AGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/530,369

Applicant(s)

MIYAGI, HIROSHI

Examiner

Stephen M. D'Agosta

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 9-5-2000 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance **for patent JP04-107941**, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 rejected under 35 U.S.C. 103(a) as being unpatentable over Kim US Patent 5,978,659 in view of cuffaro et al. US Patent 5,983,185, Kanai US Patent 5,386,589 and Lindenmeier et al. US Patent 6,011,962 (hereafter Kim, Cuffaro, Kanai and Lindenmeier).

As per **claim 1**, Kim teaches a measurement system (eg. radio characteristic evaluating apparatus, title) comprising:

A signal generator that generates and outputs a predetermined signal measurement (figure 1, #16 teaches two signal generators. The examiner also points out that many different types of test signal generators are available today, eg. Bit Error Rate Testers (BERTs) transmit a psuedo-random signal that can be measured on the receive end.

A communication device including a processor device performs predetermined demodulation processing for said signal for measurement outputted from said signal generator and outputs the demodulated signal by performing predetermined receiving operation (C2, L28-57 teaches radio terminal or base station is/are test which inherently contain a receiver and control processor and hence, reads on the claim. Also see figure 2, #2 or #4)

A measuring device that sends a result of measurement by measuring the characteristics of said demodulated signal outputted from said communication device to said processing device (figure 1, #8 and #14 teaches a spectrum analyzer and receiving BER Meter)

Wherein said processing device controls a series of measurement procedures and reports said result of measurement sent from said measuring device (figure 1, spectrum analyzer can output data to PC/Printer #10/#12 via GPIB bus shown on right side of figure)

But is silent on the “measurement system” being a wholly contained “device”.

Cuffaro teaches a device that can measure radio quality parameters (title) that is a wholly contained device (figure 1, #11 shows radio quality information being measured #17) and figures 2 and 3 show display outputs and the table shown in Column 3 shows various radio quality parameters collected and analyzed “may include” SSU, SSD, BERU, BERD, FREU, FERD, BQ, PL, etc.. Further to this point is **Kanai**, who teaches a mobile phone with “Level and BER Detectors” onboard (figure 3, #51/#53) AND **Lindenmeier** who teaches a test device (figure 1, #10) that compares the received demodulated signal to a predetermined nominal value. Both read on the claimed limitation of a communication device with test system onboard .

With further regard to claim 6, Kim is silent on the “modulating process”.

Kanai teaches both mobile and MTSO have the controller and Level/BER detectors (figure 3, #44, #47, #49 on MTSO side vs. #51, #53, #55 on the mobile side), hence one skilled in the art would be able to provide a processing device for modulation and/or demodulation of said signal for measurement outputted from said signal

Art Unit: 2684

generator (eg. reversing the direction of the data flow from receive/demodulate to transmit/modulate).

It would have been obvious to one skilled in the art at the time of the invention to modify Kim, such that the measurement system is a wholly contained communications device and a modulated test signal can be measured, to provide for a compact test system (eg. can fit in a mobile phone) that can test both transmitted/received signals.

As per **claims 2 and 7**, Kim teaches claim 1 and a display (figure 1, #10 is a PC w/monitor) **but is silent on** whereby said processing device reports said result of measurement by providing a predetermined display on said display unit.

Cuffaro teaches predetermined displays which would be used to display the data that is measured (figures 2 and 3 teach user displays for operation and/or display of data, C4, L58-65 and C5, L51-65).

It would have been obvious to one skilled in the art at the time of the invention to modify Kim, such that the processing device reports the results on a predetermined display, to provide the resultant data on a display in a format that is user friendly.

As per **claims 3 and 8**, Kim teaches claim 1 **but is silent on** wherein said processing device performs control operation corresponding to at least a part of said receiving operation during normal operation of communication device.

Kanai teaches a mobile phone with a controller onboard (figure 3, #55) which connects to the receiver (#33) and hence reads on the claimed limitation.

It would have been obvious to one skilled in the art at the time of the invention to modify Kim, such that the processing device performs control operation for receiving, to maximize the functions performed by each component which limits the number of components required and thus allows for compactness.

As per **claims 4 and 9**, Kim teaches claim 1 wherein said system includes reception processing section that receives a carrier wave having a predetermined receiving frequency and demodulates and takes out a signal included in the carrier wave (figure 1, #2 or #4 teach a cellular terminal or base station which have capability of reception/demodulation. Also, the spectrum analyzer and receiving BER Meter (#8, #14) have capability to receive/demodulate as well)

But is silent on a communications device AND said processing device performs various kinds of setting processing required when said predetermined receiving operation is performed by said reception processing section.

Kanai teaches a mobile phone with a receiver/demodulator onboard (figure 3, #33 and hence reads on the claimed limitation.

Cuffaro teaches a device that can measure radio quality parameters (title) that is a wholly contained device (figure 1, #11 shows radio quality information being measured #17) and figures 2 and 3 show display outputs and the table shown in Column 3 shows various radio quality parameters collected and analyzed "may include" SSU, SSD, BERU, BERD, FREU, FERD, BQ, PL, etc..

It would have been obvious to one skilled in the art at the time of the invention to modify Kim, such that the system is contained on one device and the processing device performs various kinds of setting processing during receive operations, to provide for a compact device and for feedback to the receiver based upon measured data.

As per **claims 5 and 10**, Kim teaches claim 1 **but is silent on** wherein said processing device is configured by a CPU that controls said measurement procedures by executing a predetermined program for measurement.

Kim does teach a computer connected to the test system which can be interpreted as providing the software measurement program(s).

Cuffaro teaches a device which executes the procedures in figure 4, which is interpreted by the examiner as requiring a CPU to execute the steps taught.

Kanai teaches a controller (figure 3, #55) which can be interpreted as a CPU.

Art Unit: 2684

It would have been obvious to one skilled in the art at the time of the invention to modify Kim, such that the processing device is a CPU that controls measurement procedures and executes a program, to provide computer control of the measurement and receive operations and hence requires little/no user intervention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


1. Grube et al US 5,361,402 teaches test device for trunked radio system.
2. Suutarinen US 6,219,544 teaches telemetric measuring system.
3. Mintz US 6,266,527 teaches measuring power and BER.
4. Vambaris et al. US 5,930,707 teaches remote cell phone testing
5. Osborne US 6,088,588 teaches wireless terminal monitoring.
6. Tse US 6,480,718 teaches wireless network automatic frequency planning.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist on 703-306-0377.

SMD
May 13, 2003


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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